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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,173	11/05/2003	William Blanc	7942-000010	7531

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EXAMINER	
LAZORCIK, JASON L	

ART UNIT	PAPER NUMBER
1731	

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/702,173	BLANC, WILLIAM	
	Examiner	Art Unit	
	Jason L. Lazorcik	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on *05 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/12/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Reese (4,375,978). Briefly, Reese teaches the construction of a lightweight glass bending mold having low thermal inertia. A detailed application of the immediate reference to the elements of Claim 1 follows with particular reference to Reese Figures 1 and 2 (see below).

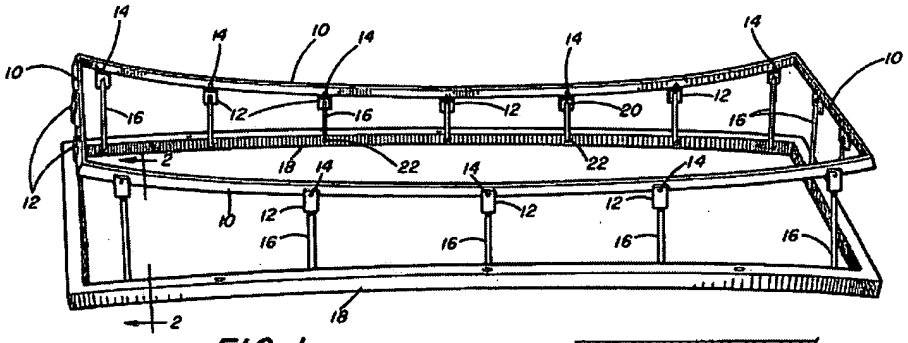


FIG. 1

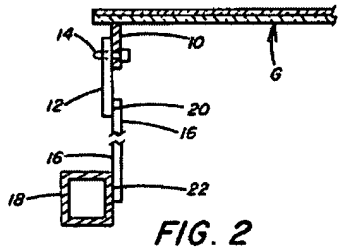


FIG. 2

Reese specifically teaches the construction of a bending ring (Figure 1) having a horizontally disposed mold reinforcing frame **(18)** (column 7, Lines10-11) which is held equivalent in the present claim as a "generally rectangular assembly". Said rectangular assembly consists of a pair of longitudinally extending members and a pair of traversely extending members. Further, said mold reinforcing frame is composed of generally square-shaped cross-section, tubular members as clearly set forth in Figure 2 **(18)**.

Reese further discloses a plurality of support rods **(16)** or "a plurality of support brackets" having an "extended portion" in the region indicated by lead line **(16)** and "a face portion" in the region of the lower weld **(22)**.

It is here understood that said tubular member of the mold reinforcing frame **(18)** in Figure 2 has a "first side" and a "second side" as depicted below. The face portion of the support bracket or support rod **(16)** is abutting said "second side" of the tubular member and is adjacent to the "first side" of the tubular member.

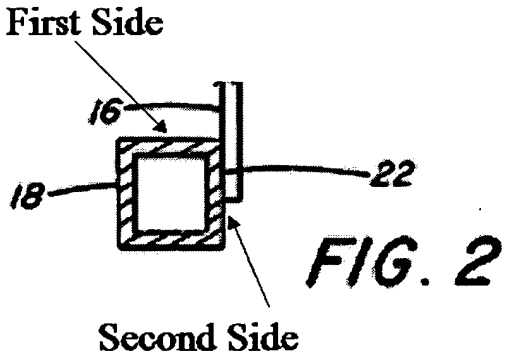


FIG. 2

The feature collectively defined by the claimed "pair of central stationary members" and "a pair of outboard movable members" is held as equivalent to the shaping rail sections **(10)** in the immediate reference. While depicted as a single body

in the above Figure 1 excerpt, Reese makes special provision for a bending ring composed of multiple subcomponents. Specifically, Reese asserts (Column 7, Lines 19-36) that;

> "the outline mold can comprise a single shaping rail extending completely around the perimeter of the outline mold ***or the shaping rail can comprise a plurality of shaping rail sections disposed in end to end relation along the perimeter of the outline mold***. The shaping rail sections may be secured to one another in any known manner...It is also possible that ***certain of the shaping rail sections may be pivotally connected to at least one other of the shaping rail sections to provide a sectionalized bending mold*** of the outline type such as depicted in several of the patents previously for producing deeper bends in glass sheets, of which the Canadian patent to Richardson is exemplary."

The specific structure here recited by Reese is commonly utilized in gravity bending applications of glass sheets. In light of the above, this structure fully anticipates the claimed structural elements of a "pair of central stationary members fixedly coupled to the pair of longitudinally extending tubular members and the "pair of outboard movable members" movably coupled to said pair of longitudinally extending tubular members.

Claim Rejections - 35 USC § 103

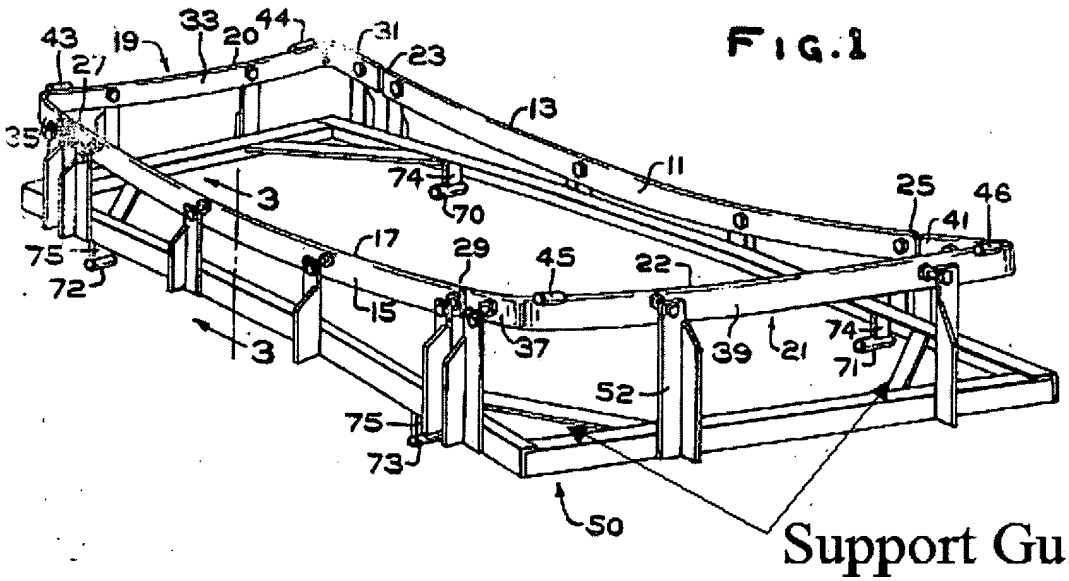
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reese (4,375,978) in view of DeAngelis (4,119,428). As described above, Reese anticipates all of the elements of Claim 1 without explicitly setting forth the case wherein a gusset is fixedly coupled between the longitudinal and traverse extending tubular member of the "generally rectangular assembly" as indicated in the immediate claim. DeAngelis describes a mold for the gravity bending of glass which includes a reinforcing frame (50) as depicted below.



DeAngelis incorporates a support gusset (indicated by arrows) spanning adjacent extending members which collectively define said reinforcing frame. It would be obvious to one of ordinary skill in the art at the time of the invention to utilize the teachings of DeAngelis to modify the mold reinforcing frame as set forth by Reese above by fixedly coupling gussets between adjacent tubular members. This modification would have been an obvious route to increase the structural durability and rigidity of said reinforcing frame.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reese (4,375,978) in view of Black (3,248,201). As described above, Reese anticipates all of the elements of Claim 1, and indicates (Column1, lines 24-26) that the reinforcing frame (18) is composed of square tubing one inch by one inch having a wall thickness of 1/16 in. Although Reese indicates (Column2, Lines 51-57) that the shaping rail (10) is stainless steel, no indication is made regarding the materials of construction for the reinforcing frame. In a description of a glass bending ring, Black indicates that stainless steel is a preferable material due to its resistance to warping at the temperatures at which glass is bent (Column 3, Lines 3-10). It would have therefore been obvious to one of ordinary skill in the art at the time of the invention to utilize stainless steel as a preferred material during the construction of the reinforcing frame as taught by Reese in order to avoid warping of said frame at glass bending temperatures.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason L. Lazorcik whose telephone number is (571)

272-2217. The examiner can normally be reached on Monday through Friday 8:30 am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JLL

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